

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

POWER MANAGEMENT ENTERPRISES, LLC, a ) Texas Limited Liability Company, ) ) Plaintiff, ) ) v. ) Civil Action No. ) ) SAMSUNG ELECTRONICS AMERICA, INC., a ) New York corporation, ) ) Defendant. ) )	
---	--

**COMPLAINT**

Plaintiff Power Management Enterprises, LLC (“PME”) files this, its Complaint against Samsung Electronics America, Inc. (“Samsung”), showing this Honorable Court as follows.

**NATURE OF THE ACTION**

1. This is an action for patent infringement, arising out of Defendant’s infringement of a U.S. patent relating to the art of managing cache memory containing data that has not been committed to persistent storage. Specifically, this Complaint asserts claims against Defendant arising from its infringement of various claims in U.S. Pat. No. 5,895,488, issued on April 20, 1999, and entitled “CACHE FLUSHING METHODS AND APPARATUS” (the “‘488 Patent”).

[True and correct copy of the ‘488 Patent is attached hereto as Exhibit A.]

**THE PARTIES**

2. Plaintiff is a limited liability company, organized and existing under the laws of Texas with its principal place of business in this District.

3. Upon information and belief, Defendant Samsung is a corporation organized and existing under the laws of the state of New York. Upon information and belief, Samsung's principal place of business is in Ridgely Park, New Jersey. Samsung may be served through its registered agent for service of process, CT Corporation System, 350 N. St. Paul St., Ste. 2900, Dallas, Texas 75201-4234.

**JURISDICTION AND VENUE**

4. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and/or 1338.

5. This Court has personal jurisdiction over the Defendant. Defendant has conducted and does conduct business within the State of Texas, including within this District. Defendant offers for sale, sells, and advertises its products and services within the State of Texas, including within this District. Defendant has committed the tort of patent infringement within the State of Texas, including within this District.

6. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391 and/or 1400.

**OPERATIVE FACTS**

THE '488 PATENT

7. PME is the owner by assignment of all right, title, and interest in the '488 Patent.

8. The '488 Patent describes a novel method and device for managing a cache containing data that has not been committed to persistent storage. The invention determines when to flush cache lines containing such uncommitted data. The device flushes the data when the device

determines that its system state is idle. This state is based upon at least two of the following indicators: (i) CPU idle percentage, (ii) data bus busyness percentage, (iii) percentage of dirty lines, and (iv) I/Os per second.

9. Claim 8 of the '488 Patent provides:

8. In a system having a host computer and a mass storage device, a mass storage controller comprising:

- a) an input/output interface for permitting communication between the host computer, the mass storage controller, and the mass storage device;
- b) a cache having a number of cache lines, some of which cache lines may include dirty data; and
- c) an input/output management controller, the input output management controller including
  - i) means for determining whether a state of a system is idle based on at least two indicators including (i) a host CPU idle percentage, (ii) data bus busyness percentage, (iii) percentage of dirty lines, and (iv) I/Os per second; and
  - (ii) means for flushing a line of the cache if the state of the system is determined to be idle.

'488 Patent, Col. 7. 1.63-Col. 8, 1.12.

#### THE INFRINGING PRODUCTS

10. Defendant Samsung, within the United States, manufactures, uses, offers for sale, or sells computers, including, but not limited to, the Samsung Series 9 15" Premium Ultrabook with an Intel Core i7 processor and Windows 8, (the "Samsung Computers") that, among other things, operates in write-back mode creating cache data that has not been committed to persistent

memory. The Samsung Computers flush this data when the processor's System Agent, in conjunction with Windows 8, determines that the state of the system is idle. To determine the idle state, the System Agent and Windows 8 use the following indicators: processor idle demote threshold; and I/Os per second and expected I/Os per second.

11. The Samsung Computers practice each limitation set forth in at least claim 8 of the '488 Patent.

12. Defendant Samsung does not have a license or other authorization to practice the claims set forth in the '488 Patent.

13. All conditions precedent to the assertion of the claims in this Complaint have been satisfied or waived.

COUNT ONE

SAMSUNG'S INFRINGEMENT OF THE '488 PATENT

14. PME incorporates by reference as if fully set forth herein the averments contained within Paragraphs 1-13, above.

15. By reason of some or all of the foregoing, Defendant Samsung has infringed at least claim 8 of the '488 Patent.

PRAYER FOR RELIEF

16. By reason of some or all of the foregoing, PME has suffered damages as the direct and proximate result of Defendant Samsung's infringement of the '488 Patent.

WHEREFORE, PME prays that this Court:

- (1) Enter judgment in favor of PME and against Defendant Samsung for infringement of the '488 Patent;

- (2) Award damages to PME in an amount to be proven at trial for infringement of the '488 Patent, pursuant to 35 U.S.C. § 284, including pre-judgment and post-judgment interest; and
- (3) Award PME such other and further relief as the Court deems just and proper, premises considered.

August 19, 2013

Respectfully submitted,

By: /s/Andrew W. Spangler  
Andrew W. Spangler  
State Bar No. 24041960  
**SPANGLER & FUSSELL P.C.**  
208 N. Green Street, Suite 300  
Longview, Texas 75601  
Telephone: 903-753-9300  
Facsimile: 903-553-0403  
Email: spangler@sfipfirm.com

Of Counsel:

**MORRIS, MANNING & MARTIN, LLP**

Jeffrey T. Breloski  
1600 Atlanta Financial Center  
3343 Peachtree Road, N.E.  
Atlanta, Georgia 30326-1044  
Telephone: (404) 233-7000  
Fax: (404) 365-9532  
Email: jbreloski@mmmlaw.com

Attorneys for Plaintiff Power Management  
Enterprises, LLC